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Sequence Listing could not be accepted.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2009; month=11; day=23; hr=16; min=16; sec=44; ms=77; ]

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Reviewer Comments:

<210> 2

<211> 15

<212> DNA

<213> Artificial Sequence

<220>

<223> Derived from GenBank X07404

As an explanation of "Artificial Sequence", the above <223> response needs more information regarding the source in GenBank X07404 (e.g., Homo sapiens). Same error in Sequences 3-5. Sequence 17 and subsequent sequences show the source of the GenBank location.

<210> 32

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> (Gly Pro Gly Gly) x where x is an integer from 3-9

<400> 32

Gly Pro Gly Gly

1

Please explain the source of "Artificial Sequence". Also, please indicate that the maximum repeats of Gly Pro Gly Gly are shown in Sequence 50.

\*\*\*\*\*

Application No: 10583812

Version No: 1.0

**Input Set:****Output Set:****Started:** 2009-11-11 13:06:14.752**Finished:** 2009-11-11 13:06:17.351**Elapsed:** 0 hr(s) 0 min(s) 2 sec(s) 599 ms**Total Warnings:** 50**Total Errors:** 0**No. of SeqIDs Defined:** 50**Actual SeqID Count:** 50

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**Input Set:**

**Output Set:**

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**Finished:** 2009-11-11 13:06:17.351  
**Elapsed:** 0 hr(s) 0 min(s) 2 sec(s) 599 ms  
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# SEQUENCE LISTING

<110> Cooper, Richard K.  
Enright, Frederick M.  
Fioretti, William C.

<120> Gene Therapy Using Transposon-Based Vectors

<130> 51687-0261 (331126)

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<141> 2009-11-11

<150> PCT/US2004/43092

<151> 2004-12-24

<150> US 60/592,098

<151> 2004-07-28

<150> US 60/565,371

<151> 2004-04-26

<150> US 60/532,504

<151> 2003-12-24

<160> 50

<170> PatentIn version 3.3

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<212> DNA

<213> Artificial Sequence

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<223> Signal sequence for human tumor necrosis factor

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<213> Artificial Sequence

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| ctgttccttt ccatgggtct tttctgcagt caccgtcgga ccatgtgtga acttgatatt    | 1800 |
| ttacatgatt ctctttacca attctgcccc gaattacact taaaacgact caacagctta    | 1860 |
| acgttggtct gccacgcatt acttgactgt aaaactctca ctcttaccga acttgccgt     | 1920 |
| aacctgccaa ccaaagcgag aacaaaacat aacatcaaac gaatcgaccg attgttaggt    | 1980 |
| aatcgtcacc tccacaaaga gcgactcgct gtataccggt ggcatgctag ctttatctgt    | 2040 |
| tcgggaatac gatgccatt gtacttggtg actggtctga tattcgtgag caaaaacgac     | 2100 |
| ttatggtatt gcgagcttca gtcgcactac acggtcgttc tgttactctt tatgagaaag    | 2160 |
| cgttcccgtt ttcagagcaa tgttcaaaga aagctcatga ccaatttcta gccgacctg     | 2220 |
| cgagcattct accgagtaac accacaccgc tcattgtcag tgatgctggc tttaaagtgc    | 2280 |
| catggtataa atccgttgag aagctgggtt ggtactggtt aagtcgagta agaggaaaag    | 2340 |
| tacaatatgc agacctagga gcggaaaact ggaaacctat cagcaactta catgatatgt    | 2400 |
| catctagtca ctcaaagact ttaggctata agaggctgac taaaagcaat ccaatctcat    | 2460 |
| gccaaattct attgtataaa tctcgctcta aaggccgaaa aaatcagcgc tcgacacgga    | 2520 |
| ctcattgtca ccaccgtca cctaaaatct actcagcgtc ggcaaaggag ccatgggttc     | 2580 |
| tagcaactaa cttacctgtt gaaattcgaa caccctaaaca acttgtaaat atctattcga   | 2640 |
| agcgaatgca gattgaagaa accttccgag acttgaaaag tcctgcctac ggactaggcc    | 2700 |
| tacgccatag ccgaacgagc agctcagagc gttttgatat catgctgcta atcgccctga    | 2760 |
| tgcttcaact aacatgttgg cttgcggggcgt ttcatgctca gaaacaagggt tgggacaagc | 2820 |
| acttccaggc taacacagtc agaaatcgaa acgtactctc aacagttcgc ttaggcatgg    | 2880 |
| aagttttgcg gcattctggc tacacaataa caagggaaga cttactcgtg gctgcaaccc    | 2940 |
| tactagctca aaatttattc acacatgggt acgctttggg gaaattatga taatgatcca    | 3000 |

|             |            |            |             |            |             |      |
|-------------|------------|------------|-------------|------------|-------------|------|
| gatcacttct  | ggctaataaa | agatcagagc | tctagagatc  | tgtgtgttgg | ttttttgtgg  | 3060 |
| atctgctgtg  | ccttctagtt | gccagccatc | tgttgtttgc  | ccctcccccg | tgccttcctt  | 3120 |
| gaccctggaa  | ggtgccactc | ccactgtcct | ttcctaataa  | aatgaggaaa | ttgcatcgca  | 3180 |
| ttgtctgagt  | aggtgtcatt | ctattctggg | gggtggggtg  | gggcagcaca | gcaaggggga  | 3240 |
| ggattgggaa  | gacaatagca | ggcatgctgg | ggatgcggtg  | ggctctatgg | gtacctctct  | 3300 |
| ctctctctct  | ctctctctct | ctctctctct | ctctcggtac  | ctctctctct | ctctctctct  | 3360 |
| ctctctctct  | ctctctctct | cggtaccagg | tgctgaagaa  | ttgaccgggt | gaccaaaggt  | 3420 |
| gcctttttatc | atcactttta | aaataaaaaa | caattactca  | gtgcctgtta | taagcagcaa  | 3480 |
| ttaattatga  | ttgatgccta | catcacaaca | aaaactgatt  | taacaaatgg | ttggtctgcc  | 3540 |
| ttagaaagta  | tatttgaaca | ttatcttgat | tatattattg  | ataataataa | aaaccttattc | 3600 |
| cctatccaag  | aagtgatgcc | tatcattggg | tggaatgaac  | ttgaaaaaaa | ttagccttga  | 3660 |
| atacattact  | ggtaaggtaa | acgccattgt | cagcaaattg  | atccaagaga | accaacttaa  | 3720 |
| agcttttctg  | acggaatgtt | aattctcggt | gaccctgagc  | actgatgaat | cccctaatga  | 3780 |
| ttttggtaaa  | aatcattaag | ttaaggtgga | tacacatctt  | gtcatatgat | cccggtaatg  | 3840 |
| tgagttagct  | cactcattag | gcacccaggg | ctttacactt  | tatgcttcgg | gctcgtatgt  | 3900 |
| tgtgtggaat  | tgtgagcgga | taacaatttc | acacaggaaa  | cagctatgac | catgattacg  | 3960 |
| ccaagcgcgc  | aattaaccct | cactaaaggg | aacaaaagct  | ggagctccac | cgcggtggcg  | 4020 |
| gccgctctag  | aactagtgga | tccccggggc | tgagggaatt  | cgatatcaag | cttatcgata  | 4080 |
| ccgctgacct  | cgaggggggg | cccggtagcc | aattcgccct  | atagtgagtc | gtattacgcg  | 4140 |
| cgctcactgg  | ccgtcgtttt | acaacgtcgt | gactgggaaa  | accctggcgt | tacccaactt  | 4200 |
| aatcgccctg  | cagcacatcc | ccctttcgcc | agctggcgta  | atagcgaaga | ggcccgcacc  | 4260 |
| gatcgccctt  | cccaacagtt | gcgcagcctg | aatggcggaat | ggaaattgta | agcgtaata   | 4320 |
| ttttgttaaa  | attcgcgta  | aatttttgtt | aaatcagctc  | attttttaac | caataggccg  | 4380 |
| aaatcggcaa  | aatcccttat | aaatcaaaag | aatagaccga  | gatagggttg | agtgttggtc  | 4440 |
| cagtttgga   | caagagtcca | ctattaaaga | acgtggactc  | caacgtcaaa | gggcgaaaaa  | 4500 |
| ccgtctatca  | gggcgatggc | ccactactcc | gggatcatat  | gacaagatgt | gtatccacct  | 4560 |
| taacttaatg  | atttttacca | aaatcattag | gggattcatc  | agtgtcagg  | gtcaacgaga  | 4620 |
| attaacattc  | cgtcaggaaa | gcttatgatg | atgatgtgct  | taaaaactta | ctcaatggct  | 4680 |

|   |      |
|---|------|
| ggttatgcat atcgcaatac atgcgaaaaa cctaaaagag cttgccgata aaaaaggcca | 4740 |
| atttattgct atttaccgcg gctttttatt gagcttgaaa gataaataaa atagataggt | 4800 |
| tttatttgaa gctaaatctt ctttatcgta aaaaatgcc tcttggtta tcaagagggt   | 4860 |
| cattatattt cgcggaataa catcatttgg tgacgaaata actaagcact tgtctcctgt | 4920 |
| ttactcccct gagcttgagg ggttaacatg aaggatcatg atagcaggat aataatacag | 4980 |
| taaaacgcta aaccaataat ccaaataccag ccatcccaa ttggtagtga atgattataa | 5040 |
| ataacagcaa acagtaatgg gccataaca ccggttgcat tggttaaggct caccaataat | 5100 |
| ccctgtaaag caccttgctg atgactcttt gtttgatag acatcactcc ctgtaatgca  | 5160 |
| ggtaaagcga tcccaccacc agccaataaa attaaaacag ggaaaactaa ccaaccttca | 5220 |
| gatataaacg ctaaaaaggc aaatgcacta ctatctgcaa taaatccgag cagtactgcc | 5280 |
| gttttttcgc ccatttagtg gctattcttc ctgccacaaa ggcttggaat actgagtgt  | 5340 |
| aaagaccaag acc  |      |